



المركز العالمي للتدريب والتطوير
International Centre For Training & Development



MOE108

Safety Management of Marine Terminal & Oil/Gas Tankers According to the International Standards (IMO, ICS, OCIMF & IAPH)



ACTVET
Abu Dhabi Centre for
Technical and Vocational
Education and Training
مركز أبوظبي
للمهارة والتدريب
التقني والمهني

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Course Introduction:

This course is designed specifically for the operation of Cargo Handling in three different types of tankers: **Oil**, **Chemical**, and **LPG** carriers. This course will give review of the principles regarding the safe operation of the tankers and all types of tankers using liquid cargo handling simulator.

Course Objectives:

Upon successful completion of this course, the delegates will be able to:

- ✓ Gain in-depth knowledge on safety operations & management of oil & gas marine terminals
- ✓ Recognize the international regulations & requirements for the oil & gas marine terminals
- ✓ Apply proper planning techniques in storage & transfer systems and command of the various planning and transfer requirements for oil & gas marine terminal
- ✓ Discuss the different vessel operations in the oil & gas marine terminal such as oil tankers (crude & product) and gas carriers (LNG / LPG)
- ✓ Develop good terminal management skills and employ various terminal support operations such as berthing support, cargo transfer support, emergency response and vessel departure support
- ✓ Apply proven safe practices and procedures during the various operations in oil & gas terminals and manage oil spill contingency and emergency response plans
- ✓ Employ the latest qualitative and quantitative risk assessment techniques in oil & gas marine terminal operations

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Who Should Attend?

This course is designed for Marine Terminal Managers, Superintendents, Supervisors and Engineers, Facility Managers and Coordinators, Safety and Environmental Managers, Engineers and Officers, Spill Management Team Members, Transfer Supervisors, Marine Shipping Coordinators and Dock Maintenance Planners.

Course Outline:

Day 1:

Cargo Properties

- **Overview and Introductions**
- **Dangerous Cargos**

- Toxicity
- Confined spaces
- Breathable atmospheres
- **Hydrocarbon properties**
 - Crude oil
 - Liquified Petroleum Gas
 - Liquified Natural Gas
- **Fires & Explosions**
 - UEL & LEL
 - BLEVE
 - Pancake cloud explosions

Day 2:

Storage & Transfer

- **Storage Tanks**
 - Atmospheric aboveground storage tanks
 - Floating roof, fixed roof, variable vapour space and pressurized tanks
 - Tank inspections & cleaning
- **Transfer Systems**
 - Centrifugal pumps design and operation
 - Piping systems
 - Flow and pressure matching
- **Ship-shore Transfers**
 - Marine Loading Arms
 - Lightering
 - The Ship/Shore Safety Checklist

Day 3:

Harbour & Vessels

- **Jetties, quays, wharves & SBMs**
 - Harbour design and construction
 - Sizing & tidal effects
 - Depth constraints & dredging operations
 - SBM design & construction
- **Hoses**
 - Cargo compatibility
 - Marking & testing
 - Storage & maintenance

- **Shipboard management**
 - Disposal of tanks washings, slops & dirty ballast
 - Bunkering
 - Communications & emergency response plans

Day 4:

Safety and Risk

- **Ignition sources**
 - Electrostatic charge
 - Hazardous zone classification
 - Intrinsically safe equipment
- **Fire fighting & protection**
 - Fire detection systems
 - Fire fighting systems
 - Shipboard firefighting systems
- **Risk**
 - Risk assessments
 - Risk management
 - Qualitative and quantitative risk assessment techniques

Day 5:

Terminal Management

- **Storage & transfer planning**
- **Berthing support**
- **Cargo transfer support**
- **Emergency response**
- **Vessel departure support**
- **Security and vessel access**
- **International regulations & requirements for oil & gas marine terminals**

Course Certificate:

International Center for Training & Development (ICTD) will award an internationally recognized certificate(s) for each delegate on completion of training.

Course Fees:

To be advised as per the course location. This rate includes participant's manual, Hand-Outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Course Methodology:

A variety of methodologies will be used during the course that includes:

- (30%) Based on Case Studies
- (30%) Techniques
- (30%) Role Play
- (10%) Concepts
- Pre-test and Post-test
- Variety of Learning Methods
- Lectures
- Case Studies and Self Questionnaires
- Group Work
- Discussion
- Presentation

Course Timings:

Daily Course Timings:

08:00 - 08:20	Morning Coffee/Tea
08:20 - 10:00	First Session
10:00 - 10:20	Coffee/Tea/Snacks
10:20 - 12:20	Second Session
12:20 - 13:30	Coffee/Tea/Snacks
13:30 - 15:00	Last Session